

## **LISTING OF THE CLAIMS:**

This listing of claims is provided for the Examiner's convenience.

1. (Currently amended) A guiding catheter system, comprising:
  - a flexible shaft having a distal end shaped for accessing a target vessel; and
  - a handle assembly movably coupled to the flexible shaft, the handle assembly comprising a guide member attached to the shaft and a housing movably coupled to the guide member via a multiple-slot and pin arrangement, the flexible shaft selectably movable between a plurality of discrete positions of a first degree-of-freedom defined relative to the flexible shaft, the flexible shaft restrained in the first degree-of-freedom at each position of the plurality of discrete positions, the flexible shaft movable through a predetermined displacement of a second degree-of-freedom defined relative to the flexible shaft at each position of the plurality of discrete positions; and
  - wherein motion of the flexible shaft relative to the handle assembly results in a controllable sweeping motion at the distal end of the flexible shaft.
2. (Original) The guiding catheter system of claim 1, wherein the first degree-of-freedom comprises a longitudinal displacement relative to the flexible shaft, and the second degree-of-freedom comprises an axial rotation relative to the flexible shaft.
3. (Original) The guiding catheter system of claim 1, wherein the first degree-of-freedom comprises an axial rotation relative to the flexible shaft, and the second degree-of-freedom comprises a longitudinal displacement relative to the flexible shaft.
4. (Original) The guiding catheter system of claim 1, further comprising a tightening member provided between the flexible shaft and the handle assembly, the tightening member providing a releasable coupling between the flexible shaft and the handle assembly.

5. (Original) The guiding catheter system of claim 4, wherein the flexible shaft is slidably positionable relative to the handle assembly in a released orientation of the tightening member, thereby allowing the flexible shaft to be adjustably positioned relative to the handle.

6. (Original) The guiding catheter system of claim 4, wherein the tightening member comprises a rotating hemostatic valve seal.

7. (Original) The guiding catheter system of claim 1, wherein the handle assembly comprises:

a housing; and

a guide member attached to the flexible shaft, the guide member restrained in the first-degree-of freedom relative to the housing at each position of the plurality of positions and movable relative to the housing through the displacement of the second degree-of-freedom at each position of the plurality of positions.

8. Canceled.

9. (Currently amended) The guiding catheter system of claim 1 ~~8~~, wherein the slot and pin arrangement includes a serpentine slot provided on the guide member slidably coupled to a pin provided on the housing.

10. (Currently amended) The guiding catheter system of claim 1 ~~8~~, wherein the slot and pin arrangement includes a serpentine slot provided on the housing slidably coupled to a pin provided on the guide member.

Claims 11-17 (Canceled)

18. (Original) A catheter assembly, comprising:  
a flexible shaft having a distal end shaped for accessing a target vessel;  
means for selectably moving the shaft between a plurality of discrete positions of a first degree-of-freedom defined relative to the flexible shaft;  
means for restraining a motion of the shaft in the first degree-of-freedom at each position of the plurality of discrete positions; and  
means for moving the flexible shaft through a second degree-of-freedom defined relative to the flexible shaft at each position of the plurality of discrete positions.

19. (Previously presented) The catheter assembly of claim 18, wherein the first degree-of-freedom comprises a longitudinal displacement relative to the flexible shaft, and the second degree-of-freedom comprises an axial rotation relative to the flexible shaft.

20. (Previously presented) The guiding catheter system of claim 18, wherein the first degree-of-freedom comprises an axial rotation relative to the flexible shaft, and the second degree-of-freedom comprises a longitudinal displacement relative to the flexible shaft.